AUDIO INTERNATIONAL® INC.
a DeCrane Aircraft Company

Multi-Standard Video Cassette Player

VCP-010-06-x

Product Description

The VCP-010-06-x is a high quality, multi-standard video cassette player. This unit plays versions of NTSC and PAL video cassettes. The video output format is selectable between NTSC and PAL mode.

AI source equipment can be optionally controlled by infrared remote (AI-RCx-17xxxx). Playback options with this remote include visual search, pause, play, stop, fast forward, rewind, eject, and format. A unique infrared strapping feature allows up to either four (4) or eight (8) similar devices to be used in the same system at the same time while maintaining independent control. The number of devices available for use in the strapping feature depends on the unit's infrared system configuration.

The "-x" suffix designates the type of connector utilized; "-1" = Positronic and "-2" = D-Subminiature.

Features

The following list provides an overview of features for the VCP-010-06-x:

- ❑ Operates directly from +28 VDC
- ❑ Compact, lightweight package
- ❑ Front panel controls w/green backlighting
- ❑ Optional infrared remote control capability
- ❑ Video output level of 1 $V_{(p-p)}$ into 75 Ω
- ❑ Audio output level of 2 V_{RMS} adjustable into 600 Ω
- ❑ Video playback formats: NTSC and PAL
- ❑ Standard plating options for front bezel
- ❑ Easy to mount and connect

Application Notes

1. According to the OUTPUT SYSTEM setting, the color system of signals to the monitor or video distribution system is as follows:

Color system of input/playback signals	OUTPUT FORMAT Setting*	Output signal color system
NTSC	NTSC	NTSC
	PAL	PAL
PAL	NTSC	NTSC
	PAL	PAL

2. Utilizing the infrared inputs, the VCP-010-06-x can be configured to accept up to four (4) different sets of infrared codes or eight (8) separate RS-485 addresses. This allows up to four (4) of the same devices when using infrared inputs or eight (8) of the same devices when using the RS-485 data bus to be used in the same system while maintaining independent control. Three (3) strap pins are available to configure the infrared codes and RS-485 addressing. Standard configuration requires no strap pins to be connected. To change the code settings, connect one (1) of the strap pins to the strap common.
3. The video output connector (BNC1) allows for connection of the VCP to the video source selector. Since the video source does not have audio switching, it will provide video output only. Separate audio outputs are provided.

Operations Summary

1 The video player has several front panel controls. To play, insert a video cassette into the VCP and the unit will automatically begin to play when the tape is inserted.
2. When the VCP reaches the end of the cassette, the player will automatically rewind the cassette and stop. Press EJECT on the front panel to unload the cassette.

3. If power is interrupted (>250 msec) while a cassette is in the video player, the player will shut down and the cassette must be ejected and reinserted into the VCP to play the tape.
4. The VCP powers up to an output of NTSC. Press the FORMAT button on the front of the player to change the output standard between NTSC and PAL.

Installation Guidelines

1. All power and ground wires must be 22 AWG, MINIMUM. All audio lines require twisted, shielded cable with the cable shields properly grounded at the source. Power ground wires must be grounded within 12 inches of the unit. Protect power wires with circuit breakers or fuses located close to the electrical power source bus.
2. The VCP-010-06-x must be mounted in a horizontal position (not on side or back).
3. Long low-level audio runs may introduce noise into the audio signal. All headphone amplifiers and line level amplifiers should be located no more than three (3) feet away from the source equipment.

Technical Specifications

Electrical	Power	1A @ +28 VDC Typ.
	Operating Voltage Range	+18 to 32 VDC
	Audio Output	2 V_{RMS} into 600 Ω
	Audio S/N	>37dB (Nominal)
	Video Output	1 $V_{(p-p)}$ into 75 Ω
	Video Format	NTSC, PAL
	Horizontal Line Resolution	NTSC – 525 PAL – 625
	Video Heads	2
	Infrared Signal Output	5 V digital logic level
Mechanical	Dimensions (l x w x h)	13.57" x 10.55" x 4.45" 34.5 cm x 28.6 cm x 11.3 cm
	Weight	8.80 lb / 3.99 kg

Drawings	Description
523772 Rev A	Initial Release

Document # 530467A – Revision History		
Level	**Date**	**Description**
IR	10/2001	Initial Release
A	01/2002	Removed MESECAM capabilities

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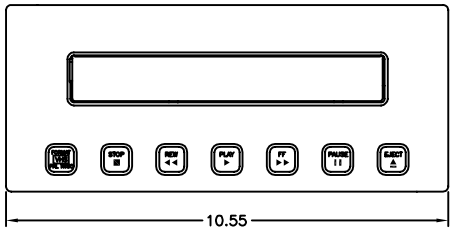
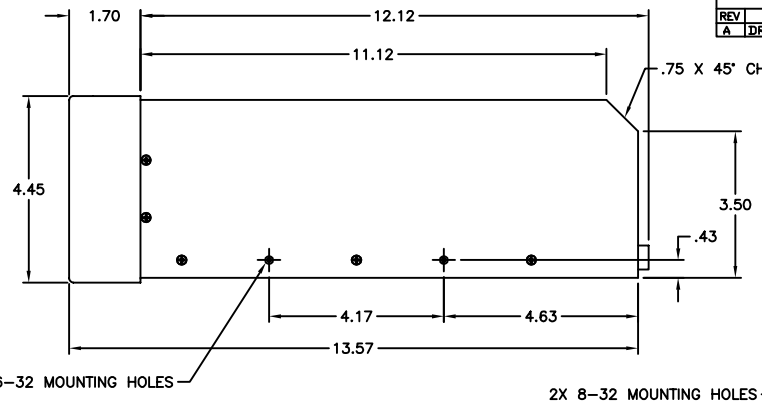
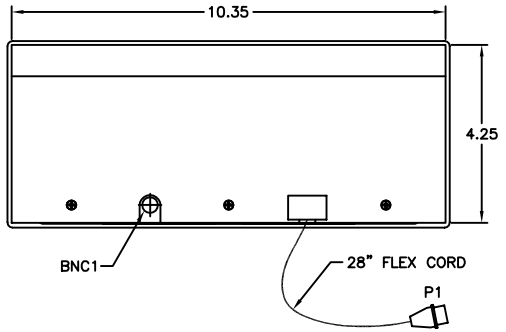
REVISIONS						
REV	DESCRIPTION	ECN	BY	CHECKED	APPROVED	DATE
A	DRAWING CORRECTION CORRECTIONS	6388	RB			5/8/01







P1 PIN CONFIGURATION

1	+28 VDC
2	GROUND
3	R+ AUDIO OUTPUT
4	R− AUDIO OUTPUT
5	L+ AUDIO OUTPUT
6	L− AUDIO OUTPUT
7	DATA BUS (A)
8	DATA BUS (B)
9	INFRARED INPUT +
10	INFRARED INPUT −
11	IR STRAP 2
12	IR STRAP 3
13	IR STRAP 4
14	IR STRAP COMMON
15	RESERVED

SPECIFICATIONS:

- POWER REQUIREMENTS: 1 AMP AT 28VDC.
- AUDIO OUTPUT LEVEL: 1VRMS TO 10VRMS ADJUSTABLE INTO 600 OHMS.
- VIDEO OUTPUT LEVEL: 1V P−P INTO 75 OHMS.
- VIDEO FORMAT(S): NTSC3.58, PAL, MESECAM.
- DATA BUS TYPE: RS 485.
- FINISH: BRUSHED BLACK ANODIZE.
- BACKLIGHTING: GREEN.

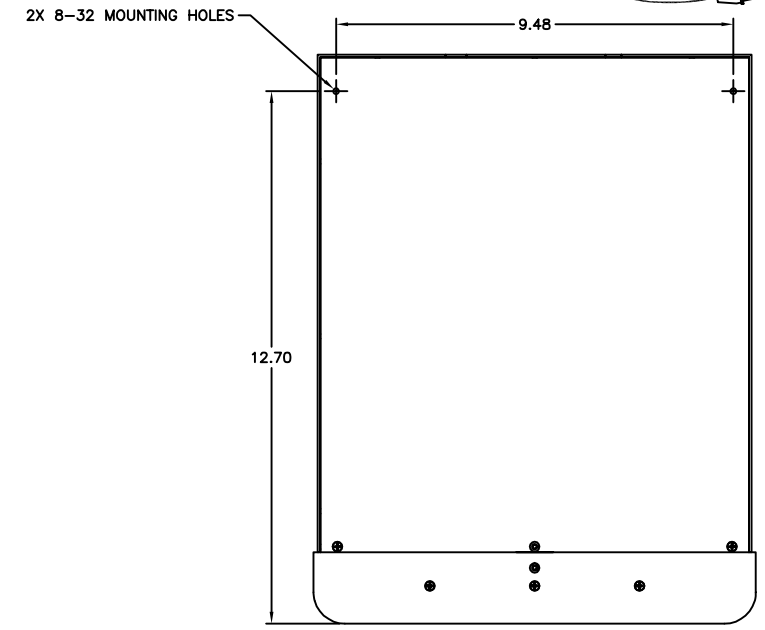
CONNECTOR DESCRIPTION FOR −1 CONFIG.

DAMA−15P	CONNECTOR
DAMA−15S	MATING CONNECTOR
D20418−2	FEMALE SCREW LOCK

BNC1 VIDEO OUTPUT
MATING CONNECTOR:
AMPHENOL 31−7008 OR EQUIV.

CONNECTOR DESCRIPTION FOR −2 CONFIG.

RD15M10JV30	CONNECTOR
RD15F10JVL0	MATING CONNECTOR



INFRARED CONFIGURATION STRAP OPTIONS:

- EACH DIFFERENT TYPE OF AUDIO INTERNATIONAL SOURCE EQUIPMENT CAN BE CONFIGURED TO ACCEPT UP TO 4 DIFFERENT SETS OF INFRARED CODES. THIS ALLOWS UP TO 4 OF THE SAME DEVICES TO BE USED IN THE SAME SYSTEM WHILE MAINTAINING INDEPENDENT CONTROLS (i.e. 4 VCPs COULD BE USED AND EACH ONE CONTROLLED INDEPENDENTLY WITH THE REMOTE CONTROL).
- 3 STRAP PINS ARE AVAILABLE TO CONFIGURE THE INFRARED CODES.
- STANDARD CONFIGURATION REQUIRES NO STRAP PINS TO BE CONNECTED. TO CHANGE THE SETTINGS, CONNECT 1 OF THE STRAP PINS TO THE STRAP COMMON.

FEATURES:

- OPERATES FROM 28 VDC.
- INFRARED REMOTE CONTROL.
- INTERFACE WITH AUDIO INTERNATIONAL DATA BUS.
- STANDARD "LINE OUT" AUDIO OUTPUT
- DESIGNED FOR INSTALLATION AND USE ON CORPORATE AIRCRAFT.
- EASY MOUNTING.
- SMALL LIGHTWEIGHT PACKAGE.

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TITLE: OUTLINE, VCP-010-06
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VT.
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